Administrator guide for MongoDB User Store

Before you configure MongoDB User Store as a secondary user store there are some prerequisites to satisfy

1. Need up and running MongoDB server in wherever the server you hosted in WSO2 Identity Server you can refer this tutorial [1] to how to configure MongoDB in your host.
2. As usual to run the WSO2 Identity in your local machine you need to set Java home variable in your machine.

Steps to Configure MongoDB User Store Manager

1. First you need to setup MongoDB in your machine there are well explained documentation available in MongoDB site if you are windows user refer windows doc[2] ,if you are linux user refer linux doc[3] and finally if you are MAC user refer mac doc[4].
2. So once you setup MongoDB Server in your machine go to **terminal** or if your are windows user goto **cmd** and run following command
   mongod
3. This will start the MongoDB server in your machine once server is started logged into Mongodb database server by giving the following command
   mongo
4. This will guide you into MongoDB database server once you successfully logged into db Server go to admin database in MongoDB by giving following command
   use admin
5. Once you successfully logged into admin database create new user with a credentials For logged into server by running following command

```
db.createUser(
        {
                user: "admin",
                pwd: "admin123",
                roles: [ { role: "userAdminAnyDatabase", db: "admin" } ]
        }
)
```

6. This will grant admin user to admin privileges in any database in MongoDB server.
7. Once you setup those basic configuration create a new database call **wso2_carbon_db** In MongoDB Server by running following command.
   use wso2_carbon_db
   This will create a new database in mongodb if a database not exists if exists then logged Into that database.
8. MongoDB has a special behaviour even it shows that it create a new database it will not Save permanently without a least single collection so let's go ahead and create a new Collection there by running following script

```
db.system.js.save({
        _id: "getNextSequence",

        value : function(name) {



                var ret = db.COUNTERS.findAndModify(



                        query: { _id: name },

                        update: { $inc: { seq: 1 } },

                        new: true

                        }

                );



        return ret.seq;

        }

});
db.COUNTERS.insert({
        _id: "UM_DOMAIN",

        seq: 0

});
db.UM_ROLE.insert({ UM_ID: getNextSequence("UM_ROLE"), UM_ROLE_NAME:
"admin", UM_TENANT_ID: -1234 });
```

Once you run the above script it will create a new function in MongoDB call getNextSequence() which accept one string as parameter and also adding a new collection call UM_ROLE

9. So with this it will create a new database in MongoDB Server call wso2_carbon_db now you setup all the prerequisites to create new MongoDB User store in admin console before you run the wso2 identity server another one requirement to fill download the mongodb java driver from here[5] and put it into repository/components/lib folder and put mongodbuserstore jar to repository/components/dropins folder.

10. That's all now start the wso2 identity server and log into admin console once you logged into admin console go to add new user store and select MongoDBUserStoreManager from user store manager class dropdown and give the earlier created user credentials and server host url and port and add that's it now it created a new mongodb user store in wso2 identity server so now if you go into add a new user or a role it will show the mongodb user store domain also as a option.

References :

[1] https://docs.mongodb.com/manual/installation/
[2] https://docs.mongodb.com/manual/tutorial/install-mongodb-on-windows/
[3] https://docs.mongodb.com/v3.0/administration/install-on-linux/
[4] https://docs.mongodb.com/v3.0/tutorial/install-mongodb-on-os-x/
[5] http://mvnrepository.com/artifact/org.mongodb/mongo-java-driver/3.2.2